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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/798,549	03/10/2004	Gang Duan	GC791-3	6389

7590 01/24/2007
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EXAMINER

KAM, CHIH MIN

ART UNIT	PAPER NUMBER
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1656

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/24/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/798,549

Applicant(s)

DUAN ET AL.

Examiner

Chih-Min Kam

Art Unit

1656

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 November 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>12/1/05</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of Group I, claims 1-12 in the response to restriction requirement filed November 14, 2006 is acknowledged. The traversal is on the ground(s) that the search can be made without additional burden on the Examiner to examine all the claims; and once the elected product claims are found allowable, that process claims would be rejoined at that time under *re Ochiai*. Applicants' response has been considered and the arguments are found persuasive. Thus, the restriction requirement is withdrawn, and claims 1-17 are examined.

Informalities

The disclosure is objected to because of the following informalities:

2. The specification (e.g., page 17, lines 14 and 21) cites embedded hyperlinks and/or other forms of browser-executable code, which are impermissible and require deletion. Appropriate correction is required.
3. The specification cites □-amylases, □-(1,4)-glucan 4- glucanohydrolase or other forms of □-.... at page 23, lines 30, 31 and page 24, line 2. Appropriate correction is required.

Objection to IDS

4. The information Disclosure Statement (IDS) is objected to because it contains a reference by Shetty *et al.* which does not have a publication date. Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

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The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1-17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-17 are indefinite because of the use of the term "derived from". The cited term renders the claim indefinite, it is not clear how different the oligosaccharide derived from the grain is from the parent compound in the grain, and what processes are involved (claim 1); and how different the starch liquefying enzyme derived from a *Bacillus* is from the parent enzyme in the *Bacillus* (claims 8-9). Use of the term "obtained from" is suggested. Claims 2-17 are included in the rejection because they are dependent on a rejected claim and do not correct the deficiency of the claim from which they depend.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 13-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Kohmoto *et al.* (Bifidobacteria Microflora 7(2), 61-69 (1988); in IDS filed 12/1/2005).

Kohmoto *et al.* teach an isomalto-oligosaccharide composition (i.e., Isomalto-900) was prepared from cornstarch by the action of α -amylase, pullulanase and α -glucosidase, where the composition dry base is analyzed by HPLC and contains 48.8% of isomaltose, 6.9% of panose and 16.9% of isomaltotriose (the paragraph bridging pages 61 and 62; Table 1; claims 13, 15,

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16). The reference also teaches addition of Isomalto-900 to some foods such as coffee jelly and mizuyokan jelly (page 62, last paragraph; claims 14 and 17). MPEP 2113 states that "Even though product by process claims are limited by and defined the process, determination of patentability of a product does not depend on its method of production. If the product in the product by process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." Since the Isomalto-900 composition contains the same isomalto-oligosaccharides as the grain composition produced by the claimed method, the composition of Kohmoto *et al.* anticipates the claimed grain composition.

Conclusion

7. No claims are allowed

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chih-Min Kam whose telephone number is (571) 272-0948. The examiner can normally be reached on 8.00-4:30, Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kathleen Bragdon can be reached at 571-272-0931. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Chih-Min Kam, Ph. D.
Primary Patent Examiner

A handwritten signature in black ink, appearing to read 'Chih-Min', followed by a long horizontal stroke.

**CHIH-MIN KAM
PRIMARY EXAMINER**

CMK

January 18, 2007